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AMENDMENT

In the Claims:

1-8 (canceled)

9 (new): A method of inhibiting tumor growth which comprises administering to a patient in need thereof an effective amount of a therapeutic peptide of the formula:

$$R_1$$
 $A^0-A^1-A^2-Trp-A^4-A^5-A^6-A^7-W$
 R_2

wherein

- $A^{\circ}=$ Gly, Nle, α -aminobutyric acid, or the D-isomer of any of Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO₂, OH, H or CH₃), Trp, Cys, or β -Nal, or is deleted;
- A^1 = the D or L-isomer of any of pGlu, Nle, or α -aminobutyric acid, or the D-isomer of any of Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO₂, OH, H or CH₃), F₅-Phe, Trp, Cys, or β -Nal, or is deleted;
- A^2 = pGlu, Gly, Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO₂, OH, H or CH₃), Trp, Cys, β -Nal, His, 1-methyl-His, or 3-methyl-His;
- A^4 = Ala, Val, Gln, Asn, Gly, Leu, Ile, Nle, α -aminobutyric acid, Met, p-X-Phe (where X = F, Cl, Br, NO₂, OH, H or CH₃), Trp, Cys, or β -Nal;
- A^5 = Gln, Asn, Gly, Ala, Leu, Ile, Nle, α -aminobutyric acid, Met, Val, p-X-Phe (where X = F, Cl, Br, OH, H or CH₃), Trp, Thr, or β -Nal;
- A^6 = Sar, Gly, or the D-isomer of any of Ala, N-methyl-Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO₂, OH, H or CH₃), Trp, Cys, or β -Nal;

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 A^7 = 1-methyl-His, 3-methyl-His or His; provided that, if A^0 is present, A^1 cannot be pGlu; further provided that, if A^0 or A^1 is present, A^2 cannot be pGlu; further provided that, when A^0 is deleted and A^1 is pGlu, R_1 must be H and R_2 must be the portion of Glu that forms the imine ring in pGlu; and further provided that, W can be any one of the following:

(I):

Z₁ O

| | | |
-NH-CH-R₃-C-V,

wherein R_3 is $CHR_{20}-(CH_2)_{n1}$ (where R_{20} is either of H or OH; and n1 is either of 1 or 0), or is deleted, and Z_1 is the identifying group of any of the amino acids Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, Gln, p-X-Phe (where X = H, F, Cl, Br, NO₂, OH, or CH₃), F_5 -Phe, Trp, Cys, Met, Pro, HyPro, cyclohexyl-Ala, or β -Nal; and V is either OR₄, or



where R_4 is any of $C_{1\text{--}20}$ alkyl, $C_{3\text{--}20}$ alkenyl, $C_{3\text{--}20}$ alkinyl, phenyl, naphthyl, or $C_{7\text{--}10}$ phenylalkyl, and each R_5 , and R_6 , independently, is any of H, $C_{1\text{--}12}$ alkyl, $C_{7\text{--}10}$ phenylalkyl, lower acyl, or



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where R_{22} is any of H, C_{1-12} alkyl, C_{7-10} phenylalkyl, or lower acyl; provided that, when one of R_5 or R_6 is $-NR_{22}$, the other is H;

(II):

wherein Z_1 is the identifying group of any of the amino acids Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, β -Nal, Gln, p-X-Phe (where X = H, F, Cl, Br, NO₂, OH or CH₃), F₅-Phe, Trp, Cys, Met, Pro, or HyPro; and each Z_2 , Z_3 , and Z_4 , independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; or

(III):

wherein each Z_{20} and Z_{30} , independently, is H, lower alkyl, lower phenylalkyl, lower naphthylalkyl; further provided that, when either of Z_{20} or Z_{30} is other than H, A^7 is His, A^6 is Gly, A^5 is Val, A^4 is Ala, A^2 is His, and either of R_1 or R_2 is other than H, A^1 must be other than deleted; further provided that, for the formulas (I) through (III), any asymmetric carbon atom can be R, S or a racemic mixture; and further provided that each R_1 and R_2 , independently, is H, C_{1-12} alkyl, C_{7-10} phenylalkyl, COE_1 (where E_1 is C_{1-20} alkyl, C_{3-20} alkinyl, phenyl, naphthyl, or C_{7-10}

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phenylalkyl), or lower acyl, and R_1 and R_2 are bonded to the N-terminal amino acid of said peptide, and further provided that when one of R_1 or R_2 is COE_1 , the other must be H, or a pharmaceutically acceptable salt thereof.

10 (new): The method of claim 9 wherein said therapeutic peptide is of the formula:

 A° = Gly, D-Phe, or is deleted;

 $A^1 = p-Glu$, D-Phe, D-Ala, D- β -Nal, D-Cpa, or D-Asn;

 $A^2 = Gln$, His, 1-methyl-His, or 3-methyl-His;

 $A^4 = Ala;$

 $A^5 = Val;$

 A^6 = Sar, Gly, D-Phe, or D-Ala;

 $A^7 = His;$

and, where W is (I) and R_3 is CH_2 or CH_2-CH_2 , Z_1 is the identifying group of Leu or Phe, where W is (I) and R_3 is $CHOH-CH_2$, Z_1 is the identifying group of Leu, cyclohexyl-Ala, or Phe and each R_5 and R_6 is H; and where W is (I), V is NHR_6 , and R_6 is NH_2 ; where W is (II), Z_1 is the identifying group of any one of the amino acids Leu or p-X-Phe (where X = H, F, Cl, Br, NO_2 , OH or CH_3); and each Z_2 , Z_3 and Z_4 , independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; and where W is (III), each Z_{20} and Z_{30} , is H; and each R_1 and R_2 , independently, is H, lower alkyl, or lower acyl.

- 11 (new): The method of claim 10 wherein said therapeutic peptide is of the formula: D-Phe-Gln-Trp-Ala-Val-Gly-His-Leu-ethylamide.
- 12 (new): The method of claim 10 wherein said therapeutic peptide is of the formula: p-Glu-Gln-Trp-Ala-Val-Gly-His-statine-amide.
- 13 (new): The method of claim 10 wherein said therapeutic peptide is of the formula:

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D-Cpa-Gln-Trp-Ala-Val-Gly-His-β-Leu-NH,.

14 (new): The method of claim 9 wherein said therapeutic peptide is of the formula: W is (I), V is OR_4 , and R_4 is any of C_{1-20} alkyl, C_{3-20} alkenyl, C_{3-20} alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl, and A^6 is N-methyl-D-Ala or A^1 is D-F₅-Phe.

15 (new): The therapeutic peptide of claim 14 of the formula:

D-Phe-Gln-Trp-Ala-Val-N-methyl-D-Ala-His-Leu-methylester.

16 (new): The therapeutic peptide of claim 10 of the formula:

D-Cpa-Gln-Trp-Ala-Val-D-Ala-His- β -Leu-NH₂.

17 (new): The method of claim 9 wherein said tumor is located in the gastrointestinal tract, pancreas, colon, prostrate or breast.

18 (new): The method of claim 9 wherein said tumor is a small-cell lung carcinoma.

19 (new): The method of claim 9 wherein said effective amount is 0.5 $\mu g/kg/day$ to 5 mg/kg/day.

20 (new): The method of claim 9 wherein said effective amount is 250 mg/patient/day.

21 (new): A method of inhibiting pancreatic adenocarcinomas which comprises administering to a patient in need thereof an effective amount of a therapeutic compound of the formula:

$$R_1$$

$$A^0-A^1-A^2-Trp-A^4-A^5-A^6-A^7-W$$

$$R_2$$

wherein

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- $A^0=$ Gly, Nle, α -aminobutyric acid, or the D-isomer of any of Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO₂, OH, H or CH₃), Trp, Cys, or β -Nal, or is deleted;
- A^1 = the D or L-isomer of any of pGlu, Nle, or α -aminobutyric acid, or the D-isomer of any of Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO₂, OH, H or CH₃), F₅-Phe, Trp, Cys, or β -Nal, or is deleted;
- A^2 = pGlu, Gly, Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO₂, OH, H or CH₃), Trp, Cys, β -Nal, His, 1-methyl-His, or 3-methyl-His;
- A^4 = Ala, Val, Gln, Asn, Gly, Leu, Ile, Nle, α -aminobutyric acid, Met, p-X-Phe (where X = F, Cl, Br, NO $_2$, OH, H or CH $_3$), Trp, Cys, or β -Nal;
- A^5 = Gln, Asn, Gly, Ala, Leu, Ile, Nle, α -aminobutyric acid, Met, Val, p-X-Phe (where X = F, Cl, Br, OH, H or CH,), Trp, Thr, or β -Nal;
- A^6 = Sar, Gly, or the D-isomer of any of Ala, N-methyl-Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO₂, OH, H or CH₃), Trp, Cys, or β -Nal;
- A^7 = 1-methyl-His, 3-methyl-His or His; provided that, if A^0 is present, A^1 cannot be pGlu; further provided that, if A^0 or A^1 is present, A^2 cannot be pGlu; further provided that, when A^0 is deleted and A^1 is pGlu, R_1 must be H and R_2 must be the portion of Glu that forms the imine ring in pGlu; and further provided that, W can be any one of the following:

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(I):

wherein R_3 is $CHR_{20}-(CH_2)_{n1}$ (where R_{20} is either of H or OH; and n1 is either of 1 or 0), or is deleted, and Z_1 is the identifying group of any of the amino acids Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, Gln, p-X-Phe (where X = H, F, Cl, Br, NO₂, OH, or CH₃), F_5 -Phe, Trp, Cys, Met, Pro, HyPro, cyclohexyl-Ala, or β -Nal; and V is either OR₄, or



where R_4 is any of C_{1-20} alkyl, C_{3-20} alkenyl, C_{3-20} alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl, and each R_5 , and R_6 , independently, is any of H, C_{1-12} alkyl, C_{7-10} phenylalkyl, lower acyl, or



where R_{22} is any of H, C_{1-12} alkyl, C_{7-10} phenylalkyl, or lower acyl; provided that, when one of R_5 or R_6 is $-NR_{22}$, the other is H;

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(II):

wherein Z_1 is the identifying group of any of the amino acids Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, β -Nal, Gln, p-X-Phe (where X = H, F, Cl, Br, NO₂, OH or CH₃), F_5 -Phe, Trp, Cys, Met, Pro, or HyPro; and each Z_2 , Z_3 , and Z_4 , independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; or

(III):

wherein each Z_{20} and Z_{30} , independently, is H, lower alkyl, lower phenylalkyl, lower naphthylalkyl; further provided that, when either of Z_{20} or Z_{30} is other than H, A⁷ is His, A⁶ is Gly, A⁵ is Val, A⁴ is Ala, A² is His, and either of R₁ or R₂ is other than H, A¹ must be other than deleted; further provided that, for the formulas (I) through (III), any asymmetric carbon atom can be R, S or a racemic mixture; and further provided that each R₁ and R₂, independently, is H, C₁₋₁₂ alkyl, C₇₋₁₀ phenylalkyl, COE₁ (where E₁ is C₁₋₂₀ alkyl, C₃₋₂₀ alkenyl, C₃₋₂₀ alkinyl, phenyl, naphthyl, or C₇₋₁₀ phenylalkyl), or lower acyl, and R₁ and R₂ are bonded to the N-terminal amino acid of said peptide, and further provided that when one of R₁ or R₂ is COE₁, the other must be H, or a pharmaceutically acceptable salt thereof.

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22 (new): The method of claim 21 wherein said therapeutic peptide is of the formula:

 $A^0 = Gly$, D-Phe, or is deleted;

 $A^1 = p-Glu$, D-Phe, D-Ala, D- β -Nal, D-Cpa, or D-Asn;

 $A^2 = Gln$, His, 1-methyl-His, or 3-methyl-His;

 $A^4 = Ala;$

 $A^5 = Val;$

 A^6 = Sar, Gly, D-Phe, or D-Ala;

 $A^7 = His;$

and, where W is (I) and R_3 is CH_2 or CH_2-CH_2 , Z_1 is the identifying group of Leu or Phe, where W is (I) and R_3 is $CHOH-CH_2$, Z_1 is the identifying group of Leu, cyclohexyl-Ala, or Phe and each R_5 and R_6 is H; and where W is (I), V is NHR₆, and R_6 is NH₂; where W is (II), Z_1 is the identifying group of any one of the amino acids Leu or p-X-Phe (where X = H, F, Cl, Br, NO₂, OH or CH₃); and each Z_2 , Z_3 and Z_4 , independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; and where W is (III), each Z_{20} and Z_{30} , is H; and each R_1 and R_2 , independently, is H, lower alkyl, or lower acyl.

- 23 (new): The method of claim 22 wherein said therapeutic peptide is of the formula:
- D-Phe-Gln-Trp-Ala-Val-Gly-His-Leu-ethylamide.
- 24 (new): The method of claim 22 wherein said therapeutic peptide is of the formula:
- $\verb|p-Glu-Gln-Trp-Ala-Val-Gly-His-statine-amide|.$
- 25 (new): The method of claim 22 wherein said therapeutic peptide is of the formula:
- D-Cpa-Gln-Trp-Ala-Val-Gly-His- β -Leu-NH,
- 26 (new): The method of claim 21 wherein said therapeutic peptide is of the formula: W is (I), V is OR_4 , and R_4 is any of C_{1-20} alkyl, C_{3-20} alkenyl, C_{3-20} alkinyl, phenyl,

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naphthyl, or C_{7-10} phenylalkyl, and A^6 is N-methyl-D-Ala or A^1 is D-Fs-Phe.

27 (new): The therapeutic peptide of claim 26 of the formula:

D-Phe-Gln-Trp-Ala-Val-N-methyl-D-Ala-His-Leu-methylester.

28 (new): The therapeutic peptide of claim 22 of the formula:

D-Cpa-Gln-Trp-Ala-Val-D-Ala-His-β-Leu-NH,.

29 (new): The method of claim 21 wherein said effective amount is $0.5~\mu g/kg/day$ to 5~mg/kg/day.

30 (new): The method of claim 21 wherein said effective amount is 250 mg/patient/day.

31 (new): A method of inhibiting gastric acid secretion which comprises administering to a patient in need thereof an effective amount of a therapeutic compound of the formula:

$$R_1$$

$$A^0-A^1-A^2-Trp-A^4-A^5-A^6-A^7-W$$

$$R_2$$

wherein

- A° = Gly, Nle, α -aminobutyric acid, or the D-isomer of any of Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO₂, OH, H or CH₃), Trp, Cys, or β -Nal, or is deleted:
- A^1 = the D or L-isomer of any of pGlu, Nle, or α -aminobutyric acid, or the D-isomer of any of Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO₂, OH, H or CH₃), F₅-Phe, Trp, Cys, or β -Nal, or is deleted;

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 A^2 = pGlu, Gly, Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO₂, OH, H or CH₃), Trp, Cys, β -Nal, His, 1-methyl-His, or 3-methyl-His;

- $A^4 = Ala, Val, Gln, Asn, Gly, Leu, Ile, Nle, \alpha-aminobutyric acid, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, or <math>\beta$ -Nal;
- A^5 = Gln, Asn, Gly, Ala, Leu, Ile, Nle, α -aminobutyric acid, Met, Val, p-X-Phe (where X = F, Cl, Br, OH, H or CH₃), Trp, Thr, or β -Nal;
- A^6 = Sar, Gly, or the D-isomer of any of Ala, N-methyl-Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO, OH, H or CH,), Trp, Cys, or β -Nal;
- A^7 = 1-methyl-His, 3-methyl-His or His; provided that, if A^0 is present, A^1 cannot be pGlu; further provided that, if A^0 or A^1 is present, A^2 cannot be pGlu; further provided that, when A^0 is deleted and A^1 is pGlu, R_1 must be H and R_2 must be the portion of Glu that forms the imine ring in pGlu; and further provided that, W can be any one of the following:

(I):

wherein R_3 is $CHR_{20}-(CH_2)_{n1}$ (where R_{20} is either of H or OH; and n1 is either of 1 or 0), or is deleted, and Z_1 is the identifying group of any of the amino acids Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, Gln, p-X-Phe (where X = H, F, Cl, Br, NO₂, OH, or CH₃), F₅-Phe, Trp, Cys, Met, Pro, HyPro, cyclohexyl-Ala, or β -Nal; and V is either OR₄, or

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where R_4 is any of C_{1-20} alkyl, C_{3-20} alkenyl, C_{3-20} alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl, and each R_5 , and R_6 , independently, is any of H, C_{1-12} alkyl, C_{7-10} phenylalkyl, lower acyl, or



where R_{22} is any of H, C_{1-12} alkyl, C_{7-10} phenylalkyl, or lower acyl; provided that, when one of R_5 or R_6 is $-NR_{22}$, the other is H;

wherein Z_1 is the identifying group of any of the amino acids Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, β -Nal, Gln, p-X-Phe (where X = H, F, Cl, Br, NO₂, OH or CH₃), F_5 -Phe, Trp, Cys, Met, Pro, or HyPro; and each Z_2 , Z_3 , and Z_4 , independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; or

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(III):



wherein each Z_{20} and Z_{30} , independently, is H, lower alkyl, lower phenylalkyl, lower naphthylalkyl; further provided that, when either of Z_{20} or Z_{30} is other than H, A⁷ is His, A⁶ is Gly, A⁵ is Val, A⁴ is Ala, A² is His, and either of R_1 or R_2 is other than H, A¹ must be other than deleted; further provided that, for the formulas (I) through (III), any asymmetric carbon atom can be R, S or a racemic mixture; and further provided that each R_1 and R_2 , independently, is H, C_{1-12} alkyl, C_{7-10} phenylalkyl, COE_1 (where E_1 is C_{1-20} alkyl, C_{3-20} alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl), or lower acyl, and R_1 and R_2 are bonded to the N-terminal amino acid of said peptide, and further provided that when one of R_1 or R_2 is COE_1 , the other must be H, or a pharmaceutically acceptable salt thereof.

32 (new): The method of claim 31 wherein said therapeutic peptide is of the formula:

 A° = Gly, D-Phe, or is deleted;

 $A^1 = p-Glu$, D-Phe, D-Ala, D- β -Nal, D-Cpa, or D-Asn;

 $A^2 = Gln$, His, 1-methyl-His, or 3-methyl-His;

 $A^4 = Ala;$

 $A^5 = Val;$

A⁶ = Sar, Gly, D-Phe, or D-Ala;

 $A^7 = His;$

and, where W is (I) and R_3 is CH_2 or CH_2-CH_2 , Z_1 is the identifying group of Leu or Phe, where W is (I) and R_3 is $CHOH-CH_2$, Z_1 is the identifying group of Leu, cyclohexyl-Ala,

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or Phe and each R_5 and R_6 is H; and where W is (I), V is NHR₆, and R_6 is NH₂; where W is (II), Z_1 is the identifying group of any one of the amino acids Leu or p-X-Phe (where X = H, F, Cl, Br, NO₂, OH or CH₃); and each Z_2 , Z_3 and Z_4 , independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; and where W is (III), each Z_{20} and Z_{30} , is H; and each R_1 and R_2 , independently, is H, lower alkyl, or lower acyl.

33 (new): The method of claim 32 wherein said therapeutic peptide is of the formula: D-Phe-Gln-Trp-Ala-Val-Gly-His-Leu-ethylamide.

34 (new): The method of claim 32 wherein said therapeutic peptide is of the formula: p-Glu-Gln-Trp-Ala-Val-Gly-His-statine-amide.

35 (new): The method of claim 32 wherein said therapeutic peptide is of the formula: D-Cpa-Gln-Trp-Ala-Val-Gly-His- β -Leu-NH,.

36 (new): The method of claim 31 wherein said therapeutic peptide is of the formula: W is (I), V is OR_4 , and R_4 is any of C_{1-20} alkyl, C_{3-20} alkenyl, C_{3-20} alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl, and A^6 is N-methyl-D-Ala or A^1 is D-F₅-Phe.

37 (new): The therapeutic peptide of claim 36 of the formula:

D-Phe-Gln-Trp-Ala-Val-N-methyl-D-Ala-His-Leu-methylester.

38 (new): The therapeutic peptide of claim 32 of the formula:

D-Cpa-Gln-Trp-Ala-Val-D-Ala-His- β -Leu-NH₂.

39 (new): The method of claim 31 wherein said effective amount is 0.5 $\mu g/kg/day$ to 5 mg/kg/day.

40 (new): A method of treating motility disorders of the GI tract which comprises administering to a patient in

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need thereof an effective amount of a therapeutic compound of the formula:

$$R_1$$
 $A^0-A^1-A^2-Trp-A^4-A^5-A^6-A^7-W$
 R_2

wherein

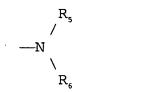
- $A^{\circ}=$ Gly, Nle, α -aminobutyric acid, or the D-isomer of any of Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO₂, OH, H or CH₃), Trp, Cys, or β -Nal, or is deleted;
- A^1 = the D or L-isomer of any of pGlu, Nle, or α -aminobutyric acid, or the D-isomer of any of Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO₂, OH, H or CH₃), F₅-Phe, Trp, Cys, or β -Nal, or is deleted;
- A^2 = pGlu, Gly, Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO₂, OH, H or CH₃), Trp, Cys, β -Nal, His, 1-methyl-His, or 3-methyl-His;
- A^4 = Ala, Val, Gln, Asn, Gly, Leu, Ile, Nle, α -aminobutyric acid, Met, p-X-Phe (where X = F, Cl, Br, NO₂, OH, H or CH₃), Trp, Cys, or β -Nal;
- A^{5} = Gln, Asn, Gly, Ala, Leu, Ile, Nle, α -aminobutyric acid, Met, Val, p-X-Phe (where X = F, Cl, Br, OH, H or CH₃), Trp, Thr, or β -Nal;
- A^6 = Sar, Gly, or the D-isomer of any of Ala, N-methyl-Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO₂, OH, H or CH₃), Trp, Cys, or β -Nal;
- A^7 = 1-methyl-His, 3-methyl-His or His; provided that, if A^0 is present, A^1 cannot be pGlu; further provided that, if A^0 or A^1 is present, A^2 cannot be pGlu;

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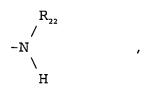
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further provided that, when A° is deleted and A° is pGlu, R_{1} must be H and R_{2} must be the portion of Glu that forms the imine ring in pGlu; and further provided that, W can be any one of the following:

wherein R_3 is $CHR_{20}-(CH_2)_{n1}$ (where R_{20} is either of H or OH; and n1 is either of 1 or 0), or is deleted, and Z_1 is the identifying group of any of the amino acids Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, Gln, p-X-Phe (where X = H, F, Cl, Br, NO₂, OH, or CH₃), F_5 -Phe, Trp, Cys, Met, Pro, HyPro, cyclohexyl-Ala, or β -Nal; and V is either OR₄, or



where R_4 is any of C_{1-20} alkyl, C_{3-20} alkenyl, C_{3-20} alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl, and each R_5 , and R_6 , independently, is any of H, C_{1-12} alkyl, C_{7-10} phenylalkyl, lower acyl, or



where R_{22} is any of H, C_{1-12} alkyl, C_{7-10} phenylalkyl, or lower acyl; provided that, when one of R_5 or R_6 is $-NR_{22}$, the other is H;

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(II):

wherein Z_1 is the identifying group of any of the amino acids Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, β -Nal, Gln, p-X-Phe (where X = H, F, Cl, Br, NO₂, OH or CH₃), F₅-Phe, Trp, Cys, Met, Pro, or HyPro; and each Z_2 , Z_3 , and Z_4 , independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; or

(III):

wherein each Z_{20} and Z_{30} , independently, is H, lower alkyl, lower phenylalkyl, lower naphthylalkyl; further provided that, when either of Z_{20} or Z_{30} is other than H, A^7 is His, A^6 is Gly, A^5 is Val, A^4 is Ala, A^2 is His, and either of R_1 or R_2 is other than H, A^1 must be other than deleted; further provided that, for the formulas (I) through (III), any asymmetric carbon atom can be R, S or a racemic mixture; and further provided that each R_1 and R_2 , independently, is H, C_{1-12} alkyl, C_{7-10} phenylalkyl, COE_1 (where E_1 is C_{1-20} alkyl, C_{3-20} alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl), or lower acyl, and R_1 and R_2 are bonded to the N-terminal amino acid of said peptide, and further provided that when one of R_1 or R_2 is COE_1 , the other must be H, or a pharmaceutically acceptable salt thereof.

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41 (new): The method of claim 40 wherein said therapeutic peptide is of the formula:

 $A^0 = Gly$, D-Phe, or is deleted;

 $A^1 = p-Glu$, D-Phe, D-Ala, D- β -Nal, D-Cpa, or D-Asn;

 $A^2 = Gln$, His, 1-methyl-His, or 3-methyl-His;

 $A^4 = Ala;$

 $A^5 = Val;$

A⁶ = Sar, Gly, D-Phe, or D-Ala;

 $A^7 = His$:

and, where W is (I) and R, is CH, or CH,-CH, Z, is the identifying group of Leu or Phe, where W is (I) and R, is CHOH-CH,, Z, is the identifying group of Leu, cyclohexyl-Ala, or Phe and each R, and R, is H; and where W is (I), V is NHR_{6} , and R_{6} is NH_{2} ; where W is (II), Z_{1} is the identifying group of any one of the amino acids Leu or p-X-Phe (where X = H, F, Cl, Br, NO₂, OH or CH₃); and each Z_2 , Z_3 and Z_4 , independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; and where W is (III), each Z_{20} and Z_{30} , is H; and each R, and R2, independently, is H, lower alkyl, or lower acyl.

42 (new): The method of claim 41 wherein said therapeutic peptide is of the formula:

D-Phe-Gln-Trp-Ala-Val-Gly-His-Leu-ethylamide.

43 (new): The method of claim 41 wherein said therapeutic peptide is of the formula:

p-Glu-Gln-Trp-Ala-Val-Gly-His-statine-amide.

44 (new): The method of claim 41 wherein said therapeutic peptide is of the formula:

D-Cpa-Gln-Trp-Ala-Val-Gly-His- β -Leu-NH,.

45 (new): The method of claim 40 wherein said therapeutic peptide is of the formula: W is (I), V is OR, and R_4 is any of C_{1-20} alkyl, C_{3-20} alkenyl, C_{3-20} alkinyl, phenyl,

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naphthyl, or C_{7-10} phenylalkyl, and A^6 is N-methyl-D-Ala or A^1 is D-F_s-Phe.

46 (new): The therapeutic peptide of claim 45 of the formula:

D-Phe-Gln-Trp-Ala-Val-N-methyl-D-Ala-His-Leu-methylester.

47 (new): The therapeutic peptide of claim 41 of the formula:

D-Cpa-Gln-Trp-Ala-Val-D-Ala-His-β-Leu-NH,.

48 (new): The method of claim 40 wherein said effective amount is $0.5~\mu g/kg/day$ to 5~mg/kg/day.

49 (new): A method of suppressing amylase release which comprises administering to a patient in need thereof an effective amount of a therapeutic peptide of the formula:

$$R_1$$

$$A^0-A^1-A^2-Trp-A^4-A^5-A^6-A^7-W$$

$$R_2$$

wherein

- $A^0=$ Gly, Nle, α -aminobutyric acid, or the D-isomer of any of Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO $_2$, OH, H or CH $_3$), Trp, Cys, or β -Nal, or is deleted;
- A^1 = the D or L-isomer of any of pGlu, Nle, or α -aminobutyric acid, or the D-isomer of any of Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO₂, OH, H or CH₃), F₅-Phe, Trp, Cys, or β -Nal, or is deleted;
- $A^2 = pGlu, \ Gly, \ Ala, \ Val, \ Gln, \ Asn, \ Leu, \ Ile, \ Met, \ p-X-Phe$ $(where \ X = F, \ Cl, \ Br, \ NO_2, \ OH, \ H \ or \ CH_3) \,, \ Trp, \ Cys, \ \beta-Nal,$ $His, \ 1-methyl-His, \ or \ 3-methyl-His;$

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 A^4 = Ala, Val, Gln, Asn, Gly, Leu, Ile, Nle, α -aminobutyric acid, Met, p-X-Phe (where X = F, Cl, Br, NO₂, OH, H or CH₃), Trp, Cys, or β -Nal;

- A^5 = Gln, Asn, Gly, Ala, Leu, Ile, Nle, α -aminobutyric acid, Met, Val, p-X-Phe (where X = F, Cl, Br, OH, H or CH₃), Trp, Thr, or β -Nal;
- A^6 = Sar, Gly, or the D-isomer of any of Ala, N-methyl-Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO₂, OH, H or CH₃), Trp, Cys, or β -Nal;

 A^7 = 1-methyl-His, 3-methyl-His or His; provided that, if A^0 is present, A^1 cannot be pGlu; further provided that, if A^0 or A^1 is present, A^2 cannot be pGlu; further provided that, when A^0 is deleted and A^1 is pGlu, R_1 must be H and R_2 must be the portion of Glu that forms the imine ring in pGlu; and further provided that, W can be any one of the following:

(I):

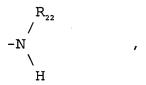
wherein R_3 is $CHR_{20}-(CH_2)_{n1}$ (where R_{20} is either of H or OH; and n1 is either of 1 or 0), or is deleted, and Z_1 is the identifying group of any of the amino acids Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, Gln, p-X-Phe (where X = H, F, Cl, Br, NO₂, OH, or CH₃), F_5 -Phe, Trp, Cys, Met, Pro, HyPro, cyclohexyl-Ala, or β -Nal; and V is either OR₄, or

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where R_4 is any of $C_{1\text{--}20}$ alkyl, $C_{3\text{--}20}$ alkenyl, $C_{3\text{--}20}$ alkinyl, phenyl, naphthyl, or $C_{7\text{--}10}$ phenylalkyl, and each R_5 , and R_6 , independently, is any of H, $C_{1\text{--}12}$ alkyl, $C_{7\text{--}10}$ phenylalkyl, lower acyl, or



where R_{22} is any of H, C_{1-12} alkyl, C_{7-10} phenylalkyl, or lower acyl; provided that, when one of R_5 or R_6 is $-NR_{22}$, the other is H;

wherein Z_1 is the identifying group of any of the amino acids Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, β -Nal, Gln, p-X-Phe (where X = H, F, Cl, Br, NO₂, OH or CH₃), F₅-Phe, Trp, Cys, Met, Pro, or HyPro; and each Z_2 , Z_3 , and Z_4 , independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; or

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(III):



wherein each Z_{20} and Z_{30} , independently, is H, lower alkyl, lower phenylalkyl, lower naphthylalkyl; further provided that, when either of Z_{20} or Z_{30} is other than H, A^7 is His, A^6 is Gly, A^5 is Val, A^4 is Ala, A^2 is His, and either of R_1 or R_2 is other than H, A^1 must be other than deleted; further provided that, for the formulas (I) through (III), any asymmetric carbon atom can be R, S or a racemic mixture; and further provided that each R_1 and R_2 , independently, is H, C_{1-12} alkyl, C_{7-10} phenylalkyl, COE_1 (where E_1 is C_{1-20} alkyl, C_{3-20} alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl), or lower acyl, and R_1 and R_2 are bonded to the N-terminal amino acid of said peptide, and further provided that when one of R_1 or R_2 is COE_1 , the other must be H, or a pharmaceutically acceptable salt thereof.

50 (new): The method of claim 49 wherein said therapeutic peptide is of the formula:

 A° = Gly, D-Phe, or is deleted;

 $A^1 = p-Glu$, D-Phe, D-Ala, D- β -Nal, D-Cpa, or D-Asn;

 $A^2 = Gln$, His, 1-methyl-His, or 3-methyl-His;

 $A^4 = Ala;$

 $A^5 = Val;$

 A^6 = Sar, Gly, D-Phe, or D-Ala;

 $A^7 = His;$

and, where W is (I) and R_3 is CH_2 or CH_2-CH_2 , Z_1 is the identifying group of Leu or Phe, where W is (I) and R_3 is $CHOH-CH_2$, Z_1 is the identifying group of Leu, cyclohexyl-Ala,

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or Phe and each R_5 and R_6 is H; and where W is (I), V is NHR₆, and R_6 is NH₂; where W is (II), Z_1 is the identifying group of any one of the amino acids Leu or p-X-Phe (where X = H, F, Cl, Br, NO₂, OH or CH₃); and each Z_2 , Z_3 and Z_4 , independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; and where W is (III), each Z_{20} and Z_{30} , is H; and each R_1 and R_2 , independently, is H, lower alkyl, or lower acyl.

51 (new): The method of claim 50 wherein said therapeutic peptide is of the formula:

D-Phe-Gln-Trp-Ala-Val-Gly-His-Leu-ethylamide.

52 (new): The method of claim 50 wherein said therapeutic peptide is of the formula: p-Glu-Gln-Trp-Ala-Val-Gly-His-statine-amide.

53 (new): The method of claim 50 wherein said therapeutic peptide is of the formula:

D-Cpa-Gln-Trp-Ala-Val-Gly-His- β -Leu-NH,.

54 (new): The method of claim 49 wherein said therapeutic peptide is of the formula: W is (I), V is OR_4 , and R_4 is any of C_{1-20} alkyl, C_{3-20} alkenyl, C_{3-20} alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl, and A^6 is N-methyl-D-Ala or A^1 is D-F₅-Phe.

55 (new): The therapeutic peptide of claim 54 of the formula:

D-Phe-Gln-Trp-Ala-Val-N-methyl-D-Ala-His-Leu-methylester.

56 (new): The therapeutic peptide of claim 50 of the formula:

D-Cpa-Gln-Trp-Ala-Val-D-Ala-His- β -Leu-NH₂.

57 (new): The method of claim 49 wherein said effective amount is 0.5 μ g/kg/day to 5 mg/kg/day.

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58 (new): A method of treating cancer cachexia which comprises administering to a patient in need thereof an effective amount of a therapeutic compound of the formula:

$$R_1$$

$$A^0-A^1-A^2-Trp-A^4-A^5-A^6-A^7-W$$

$$R_2$$

wherein

- $A^{\circ}=$ Gly, Nle, α -aminobutyric acid, or the D-isomer of any of Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO₂, OH, H or CH₃), Trp, Cys, or β -Nal, or is deleted;
- A^1 = the D or L-isomer of any of pGlu, Nle, or α -aminobutyric acid, or the D-isomer of any of Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO₂, OH, H or CH₃), F₅-Phe, Trp, Cys, or β -Nal, or is deleted;
- A^2 = pGlu, Gly, Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO₂, OH, H or CH₃), Trp, Cys, β -Nal, His, 1-methyl-His, or 3-methyl-His;
 - A^4 = Ala, Val, Gln, Asn, Gly, Leu, Ile, Nle, α -aminobutyric acid, Met, p-X-Phe (where X = F, Cl, Br, NO₂, OH, H or CH₃), Trp, Cys, or β -Nal;
 - A^5 = Gln, Asn, Gly, Ala, Leu, Ile, Nle, α -aminobutyric acid, Met, Val, p-X-Phe (where X = F, Cl, Br, OH, H or CH,), Trp, Thr, or β -Nal;
 - A^6 = Sar, Gly, or the D-isomer of any of Ala, N-methyl-Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO₂, OH, H or CH₃), Trp, Cys, or β -Nal;
 - $A^7 = 1$ -methyl-His, 3-methyl-His or His;

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provided that, if A^0 is present, A^1 cannot be pGlu; further provided that, if A^0 or A^1 is present, A^2 cannot be pGlu; further provided that, when A^0 is deleted and A^1 is pGlu, R_1 must be H and R_2 must be the portion of Glu that forms the imine ring in pGlu; and further provided that, W can be any one of the following:

(I):

wherein R_3 is $CHR_{20}-(CH_2)_{n1}$ (where R_{20} is either of H or OH; and n1 is either of 1 or 0), or is deleted, and Z_1 is the identifying group of any of the amino acids Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, Gln, p-X-Phe (where X = H, F, Cl, Br, NO₂, OH, or CH₃), F_5 -Phe, Trp, Cys, Met, Pro, HyPro, cyclohexyl-Ala, or β -Nal; and V is either OR₄, or



where R_4 is any of $C_{1\text{--}20}$ alkyl, $C_{3\text{--}20}$ alkenyl, $C_{3\text{--}20}$ alkinyl, phenyl, naphthyl, or $C_{7\text{--}10}$ phenylalkyl, and each R_5 , and R_6 , independently, is any of H, $C_{1\text{--}12}$ alkyl, $C_{7\text{--}10}$ phenylalkyl, lower acyl, or

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where R_{22} is any of H, C_{1-12} alkyl, C_{7-10} phenylalkyl, or loweracyl; provided that, when one of R_5 or R_6 is $-NR_{22}$, the other is H;

wherein Z_1 is the identifying group of any of the amino acids Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, β -Nal, Gln, p-X-Phe (where X = H, F, Cl, Br, NO₂, OH or CH₃), F₅-Phe, Trp, Cys, Met, Pro, or HyPro; and each Z_2 , Z_3 , and Z_4 , independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; or

(III):



wherein each Z_{20} and Z_{30} , independently, is H, lower alkyl, lower phenylalkyl, lower naphthylalkyl; further provided that, when either of Z_{20} or Z_{30} is other than H, A^7 is His, A^6 is Gly, A^5 is Val, A^4 is Ala, A^2 is His, and either of R_1 or R_2 is other than H, A^1 must be other than deleted; further

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provided that, for the formulas (I) through (III), any asymmetric carbon atom can be R, S or a racemic mixture; and further provided that each R_1 and R_2 , independently, is H, C_{1-12} alkyl, C_{7-10} phenylalkyl, COE_1 (where E_1 is C_{1-20} alkyl, C_{3-20} alkenyl, C_{3-20} alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl), or lower acyl, and R_1 and R_2 are bonded to the N-terminal amino acid of said peptide, and further provided that when one of R_1 or R_2 is COE_1 , the other must be H, or a pharmaceutically acceptable salt thereof.

59 (new): The method of claim 58 wherein said therapeutic peptide is of the formula:

 A° = Gly, D-Phe, or is deleted;

 $A^1 = p-Glu$, D-Phe, D-Ala, D- β -Nal, D-Cpa, or D-Asn;

 $A^2 = Gln$, His, 1-methyl-His, or 3-methyl-His;

 $A^4 = Ala;$

 $A^5 = Val;$

A⁶ = Sar, Gly, D-Phe, or D-Ala;

A' = His;

and, where W is (I) and R_3 is CH_2 or CH_2-CH_2 , Z_1 is the identifying group of Leu or Phe, where W is (I) and R_3 is $CHOH-CH_2$, Z_1 is the identifying group of Leu, cyclohexyl-Ala, or Phe and each R_5 and R_6 is H; and where W is (I), V is NHR_6 , and R_6 is NH_2 ; where W is (II), Z_1 is the identifying group of any one of the amino acids Leu or p-X-Phe (where X = H, F, Cl, Br, NO_2 , OH or CH_3); and each Z_2 , Z_3 and Z_4 , independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; and where W is (III), each Z_{20} and Z_{30} , is H; and each R_1 and R_2 , independently, is H, lower alkyl, or lower acyl.

60 (new): The method of claim 59 wherein said therapeutic peptide is of the formula: D-Phe-Gln-Trp-Ala-Val-Gly-His-Leu-ethylamide.

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61 (new): The method of claim 59 wherein said therapeutic peptide is of the formula: p-Glu-Gln-Trp-Ala-Val-Gly-His-statine-amide.

62 (new): The method of claim 59 wherein said therapeutic peptide is of the formula:

D-Cpa-Gln-Trp-Ala-Val-Gly-His- β -Leu-NH₂.

63 (new): The method of claim 58 wherein said therapeutic peptide is of the formula: W is (I), V is OR_4 , and R_4 is any of C_{1-20} alkyl, C_{3-20} alkenyl, C_{3-20} alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl, and A^6 is N-methyl-D-Ala or A^1 is D-F₅-Phe.

64 (new): The therapeutic peptide of claim 63 of the formula:

D-Phe-Gln-Trp-Ala-Val-N-methyl-D-Ala-His-Leu-methylester.

65 (new): The therapeutic peptide of claim 59 of the formula:

D-Cpa-Gln-Trp-Ala-Val-D-Ala-His-β-Leu-NH,.

66 (new): The method of claim 58 wherein said effective amount is 0.5 $\mu g/kg/day$ to 5 mg/kg/day.

67 (new): A method of inhibiting growth hormone release which comprises administering to a patient in need thereof an effective amount of a therapeutic peptide of the formula:

$$R_{1}$$
 $A^{0}-A^{1}-A^{2}-Trp-A^{4}-A^{5}-A^{6}-A^{7}-W$
 R_{2}

wherein

 $A^0=$ Gly, Nle, α -aminobutyric acid, or the D-isomer of any of Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO₂, OH, H or CH₃), Trp, Cys, or β -Nal, or is deleted;

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 A^1 = the D or L-isomer of any of pGlu, Nle, or α -aminobutyric acid, or the D-isomer of any of Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO₂, OH, H or CH₃), F₅-Phe, Trp, Cys, or β -Nal, or is deleted;

- A^2 = pGlu, Gly, Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO₂, OH, H or CH₃), Trp, Cys, β -Nal, His, 1-methyl-His, or 3-methyl-His;
- A^4 = Ala, Val, Gln, Asn, Gly, Leu, Ile, Nle, α -aminobutyric acid, Met, p-X-Phe (where X = F, Cl, Br, NO₂, OH, H or CH₃), Trp, Cys, or β -Nal;
- A^5 = Gln, Asn, Gly, Ala, Leu, Ile, Nle, α -aminobutyric acid, Met, Val, p-X-Phe (where X = F, Cl, Br, OH, H or CH₃), Trp, Thr, or β -Nal;
- A^6 = Sar, Gly, or the D-isomer of any of Ala, N-methyl-Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO, OH, H or CH,), Trp, Cys, or β -Nal;
- A^7 = 1-methyl-His, 3-methyl-His or His; provided that, if A^0 is present, A^1 cannot be pGlu; further provided that, if A^0 or A^1 is present, A^2 cannot be pGlu; further provided that, when A^0 is deleted and A^1 is pGlu, R_1 must be H and R_2 must be the portion of Glu that forms the imine ring in pGlu; and further provided that, W can be any one of the following:

(I):

$$\begin{bmatrix} Z_1 & O \\ | & \parallel \\ -NH-CH-R_3-C-V , \end{bmatrix}$$

wherein R_3 is $CHR_{20}-(CH_2)_{n1}$ (where R_{20} is either of H or OH; and n1 is either of 1 or 0), or is deleted, and Z_1 is the identifying group of any of the amino acids Gly, Ala, Val,

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Leu, Ile, Ser, Asp, Asn, Glu, Gln, p-X-Phe (where X = H, F, Cl, Br, NO₂, OH, or CH₃), F_5 -Phe, Trp, Cys, Met, Pro, HyPro, cyclohexyl-Ala, or β -Nal; and V is either OR₄, or



where R_4 is any of $C_{1\text{--}20}$ alkyl, $C_{3\text{--}20}$ alkenyl, $C_{3\text{--}20}$ alkinyl, phenyl, naphthyl, or $C_{7\text{--}10}$ phenylalkyl, and each R_5 , and R_6 , independently, is any of H, $C_{1\text{--}12}$ alkyl, $C_{7\text{--}10}$ phenylalkyl, lower acyl, or



where R_{22} is any of H, C_{1-12} alkyl, C_{7-10} phenylalkyl, or lower acyl; provided that, when one of R_5 or R_6 is $-NR_{22}$, the other is H;

wherein Z_1 is the identifying group of any of the amino acids Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, β -Nal, Gln, p-X-Phe (where X = H, F, Cl, Br, NO₂, OH or CH₃), F₅-Phe, Trp, Cys, Met, Pro, or HyPro; and each Z_2 , Z_3 , and Z_4 , independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; or

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(III):



wherein each Z_{20} and Z_{30} , independently, is H, lower alkyl, lower phenylalkyl, lower naphthylalkyl; further provided that, when either of Z_{20} or Z_{30} is other than H, A⁷ is His, A⁶ is Gly, A⁵ is Val, A⁴ is Ala, A² is His, and either of R_1 or R_2 is other than H, A¹ must be other than deleted; further provided that, for the formulas (I) through (III), any asymmetric carbon atom can be R, S or a racemic mixture; and further provided that each R_1 and R_2 , independently, is H, C_{1-12} alkyl, C_{7-10} phenylalkyl, COE_1 (where E_1 is C_{1-20} alkyl, C_{3-20} alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl), or lower acyl, and R_1 and R_2 are bonded to the N-terminal amino acid of said peptide, and further provided that when one of R_1 or R_2 is COE_1 , the other must be H, or a pharmaceutically acceptable salt thereof.

68 (new): The method of claim 67 wherein said therapeutic peptide is of the formula:

 A° = Gly, D-Phe, or is deleted;

 $A^1 = p-Glu$, D-Phe, D-Ala, D- β -Nal, D-Cpa, or D-Asn;

 $A^2 = Gln$, His, 1-methyl-His, or 3-methyl-His;

 $A^4 = Ala;$

 $A^5 = Val;$

A⁶ = Sar, Gly, D-Phe, or D-Ala;

 $A^7 = His;$

and, where W is (I) and R_3 is CH_2 or CH_2-CH_2 , Z_1 is the identifying group of Leu or Phe, where W is (I) and R_3 is $CHOH-CH_2$, Z_1 is the identifying group of Leu, cyclohexyl-Ala,

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or Phe and each R, and R, is H; and where W is (I), V is NHR, and R is NH,; where W is (II), Z, is the identifying group of any one of the amino acids Leu or p-X-Phe (where X = H, F, Cl, Br, NO_2 , OH or CH_3); and each Z_2 , Z_3 and Z_4 , independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; and where W is (III), each Z_{20} and Z_{30} , is H; and each R_1 and R_2 , independently, is H, lower alkyl, or lower acyl.

69 (new): The method of claim 68 wherein said therapeutic peptide is of the formula: D-Phe-Gln-Trp-Ala-Val-Gly-His-Leu-ethylamide.

70 (new): The method of claim 68 wherein said therapeutic peptide is of the formula: p-Glu-Gln-Trp-Ala-Val-Gly-His-statine-amide.

71 (new): The method of claim 68 wherein said therapeutic peptide is of the formula: D-Cpa-Gln-Trp-Ala-Val-Gly-His-β-Leu-NH,.

72 (new): The method of claim 67 wherein said therapeutic peptide is of the formula: W is (I), V is OR, and R₄ is any of C₁₋₂₀alkyl, C₃₋₂₀alkenyl, C₃₋₂₀alkinyl, phenyl, naphthyl, or C₇₋₁₀ phenylalkyl, and A⁶ is N-methyl-D-Ala or A¹ is D-F,-Phe.

73 (new): The therapeutic peptide of claim 72 of the formula:

D-Phe-Gln-Trp-Ala-Val-N-methyl-D-Ala-His-Leu-methylester.

74 (new): The therapeutic peptide of claim 68 of the formula:

D-Cpa-Gln-Trp-Ala-Val-D-Ala-His-β-Leu-NH,.

75 (new): The method of claim 67 wherein said growth hormone is a factor in the progression of muscular dystrophy in a patient.

76 (new): The method of claim 67 wherein said growth hormone is a factor in the onset of diabetes in a patient.

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77 (new): The method of claim 67 wherein said growth hormone is a factor in the development of diabetes-related retinopathy in a patient.

78 (new): The method of claim 67 wherein said effective amount is $0.5~\mu g/kg/day$ to 5~mg/kg/day.

79 (new): The method of claim 67 wherein said effective amount is 0.01 μ g/kg/day to 1000 μ g/kg/day.

80 (new): The method of claim 67 wherein said effective amount is $0.1~\mu g/kg/day$ to $100~\mu g/kg/day$.

81 (new): A method of treating artherosclerosis which comprises administering to a patient in need thereof an effective amount of a therapeutic peptide of the formula:

$$R_1$$
 $A^0-A^1-A^2-Trp-A^4-A^5-A^6-A^7-W$
 R_2

wherein

 $A^{\circ}=$ Gly, Nle, α -aminobutyric acid, or the D-isomer of any of Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO₂, OH, H or CH₃), Trp, Cys, or β -Nal, or is deleted;

 A^1 = the D or L-isomer of any of pGlu, Nle, or α -aminobutyric acid, or the D-isomer of any of Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO₂, OH, H or CH₃), F₅-Phe, Trp, Cys, or β -Nal, or is deleted;

 $A^2 = pGlu, Gly, Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe \\ (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, \beta-Nal, \\ His, 1-methyl-His, or 3-methyl-His;$

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 A^4 = Ala, Val, Gln, Asn, Gly, Leu, Ile, Nle, α -aminobutyric acid, Met, p-X-Phe (where X = F, Cl, Br, NO₂, OH, H or CH₃), Trp, Cys, or β -Nal;

- A^5 = Gln, Asn, Gly, Ala, Leu, Ile, Nle, α -aminobutyric acid, Met, Val, p-X-Phe (where X = F, Cl, Br, OH, H or CH₃), Trp, Thr, or β -Nal;
- A^6 = Sar, Gly, or the D-isomer of any of Ala, N-methyl-Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO₂, OH, H or CH₃), Trp, Cys, or β -Nal;

 A^7 = 1-methyl-His, 3-methyl-His or His; provided that, if A^0 is present, A^1 cannot be pGlu; further provided that, if A^0 or A^1 is present, A^2 cannot be pGlu; further provided that, when A^0 is deleted and A^1 is pGlu, R_1 must be H and R_2 must be the portion of Glu that forms the imine ring in pGlu; and further provided that, W can be any one of the following:

(I):

wherein R_3 is $CHR_{20}-(CH_2)_{n1}$ (where R_{20} is either of H or OH; and n1 is either of 1 or 0), or is deleted, and Z_1 is the identifying group of any of the amino acids Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, Gln, p-X-Phe (where X = H, F, Cl, Br, NO₂, OH, or CH₃), F_5 -Phe, Trp, Cys, Met, Pro, HyPro, cyclohexyl-Ala, or β -Nal; and V is either OR₄, or

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where R_4 is any of $C_{1\text{--}20}$ alkyl, $C_{3\text{--}20}$ alkenyl, $C_{3\text{--}20}$ alkinyl, phenyl, naphthyl, or $C_{7\text{--}10}$ phenylalkyl, and each R_5 , and R_6 , independently, is any of H, $C_{1\text{--}12}$ alkyl, $C_{7\text{--}10}$ phenylalkyl, lower acyl, or



where R_{22} is any of H, C_{1-12} alkyl, C_{7-10} phenylalkyl, or lower acyl; provided that, when one of R_5 or R_6 is $-NR_{22}$, the other is H;

wherein Z_1 is the identifying group of any of the amino acids Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, β -Nal, Gln, p-X-Phe (where X = H, F, Cl, Br, NO₂, OH or CH₃), F_5 -Phe, Trp, Cys, Met, Pro, or HyPro; and each Z_2 , Z_3 , and Z_4 , independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; or

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(III):



wherein each Z_{20} and Z_{30} , independently, is H, lower alkyl, lower phenylalkyl, lower naphthylalkyl; further provided that, when either of Z_{20} or Z_{30} is other than H, A' is His, A' is Gly, A' is Val, A' is Ala, A' is His, and either of R_1 or R_2 is other than H, A' must be other than deleted; further provided that, for the formulas (I) through (III), any asymmetric carbon atom can be R, S or a racemic mixture; and further provided that each R_1 and R_2 , independently, is H, C_{1-12} alkyl, C_{7-10} phenylalkyl, COE_1 (where E_1 is C_{1-20} alkyl, C_{3-20} alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl), or lower acyl, and R_1 and R_2 are bonded to the N-terminal amino acid of said peptide, and further provided that when one of R_1 or R_2 is COE_1 , the other must be H, or a pharmaceutically acceptable salt thereof.

82 (new): The method of claim 81 wherein said therapeutic peptide is of the formula:

 A° = Gly, D-Phe, or is deleted;

 $A^1 = p-Glu$, D-Phe, D-Ala, D- β -Nal, D-Cpa, or D-Asn;

 $A^2 = Gln$, His, 1-methyl-His, or 3-methyl-His;

 $A^4 = Ala;$

 $A^5 = Val;$

 A^6 = Sar, Gly, D-Phe, or D-Ala;

 $A^7 = His;$

and, where W is (I) and R_3 is CH_2 or CH_2-CH_2 , Z_1 is the identifying group of Leu or Phe, where W is (I) and R_3 is $CHOH-CH_2$, Z_1 is the identifying group of Leu, cyclohexyl-Ala,

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or Phe and each R, and R, is H; and where W is (I), V is NHR, and R is NH,; where W is (II), Z, is the identifying group of any one of the amino acids Leu or p-X-Phe (where X = H, F, C1, Br, NO,, OH or CH,); and each Z,, Z, and Z,, independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; and where W is (III), each Z_{20} and Z_{30} , is H; and each R, and R, independently, is H, lower alkyl, or lower acyl.

83 (new): The method of claim 82 wherein said therapeutic peptide is of the formula:

D-Phe-Gln-Trp-Ala-Val-Gly-His-Leu-ethylamide. 84 (new): The method of claim 82 wherein said

therapeutic peptide is of the formula:

p-Glu-Gln-Trp-Ala-Val-Gly-His-statine-amide.

85 (new): The method of claim 82 wherein said therapeutic peptide is of the formula:

D-Cpa-Gln-Trp-Ala-Val-Gly-His- β -Leu-NH,.

86 (new): The method of claim 81 wherein said therapeutic peptide is of the formula: W is (I), V is OR, and R_4 is any of C_{1-20} alkyl, C_{3-20} alkenyl, C_{3-20} alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl, and A^6 is N-methyl-D-Ala or A^1 is D-F,-Phe.

87 (new): The therapeutic peptide of claim 86 of the formula:

D-Phe-Gln-Trp-Ala-Val-N-methyl-D-Ala-His-Leu-methylester.

88 (new): The therapeutic peptide of claim 82 of the formula:

D-Cpa-Gln-Trp-Ala-Val-D-Ala-His- β -Leu-NH,.

89 (new): The method of claim 81 wherein said effective amount is $0.5 \mu g/kg/day$ to 5 mg/kg/day.